

REMARKS

In the instant application, Claims 1-3 and 5-25 are pending. Reconsideration of the pending claims in view of the following remarks is respectfully requested.

Claim Rejection under 35 U.S.C. § 112, second paragraph

Claims 1-3 and 5-7 stand rejected under 35 U.S.C. § 112, second paragraph.

According to the Office Action, the term “significant” is indefinite. Applicants respectfully traverse this ground of rejection. Applicants submit the term “significant” is definite based upon the teachings in the specification, specifically in the Examples. Applicants remind the Examiner “it is well established that the determination whether a claim is invalid as indefinite ‘depends on whether those skilled in the art would understand the scope of the claim when the claim is read in light of the specification’”. See Atmel v. Information Storage Devices, Inc., 198 F 3d, 1374, 53 USPQ 2d 1225 (Fed. Cir. 1999) quoting North Am Vaccine Inc., v. American Cyanamid Co., 7F 3d 1571, 1579 (Fed Cir. 1993). Applicants submit the term “significant” is definite based on the specification, specifically the discussion following Table 2(a).

As can be seen from Table 2a, all the conditioned dispersions (examples 4 to 10) are significantly more stable to storage, also at higher storage temperatures, after creaming compared with the non-conditioned comparison materials (examples 1 to 3), which can be seen by the fact that a drop in the pH scarcely no longer takes place after storage of the dispersions according to examples 4 to 10.

Applicants submit one skilled in the art would understand the meaning of the word “significant” based on the discussion of Examples 4 to 10. Applicants submit the discussion clearly addresses Example 3. Accordingly, Applicants submit Claim 1-3 and 5-7 are definite.

The Office Action further alleges the claims are unclear in the reference to “storing” and “storage”. However, the Office Action then proceeds to state the specification supports

the fact that these are different steps in the process. Accordingly, Applicants submit the claims as written are definite. Clearly, as supported by the specification, “storing” is defined on page 7, lines 24-29, and in the Examples at Table 1b. Likewise, “storage” is clearly defined in Table 2a. Applicants respectfully remind the Examiner “[a] claim is not ‘indefinite’ simply because it is hard to understand when viewed without benefit of the specification”. See 3 Inc. v. n Vidia Corp., 259 F.3d 1364, 59 USPQ 2d 1745 (Fed. Cir. 2001).

Claim Rejection Under 35 U.S.C. § 102/103

Claims 1-3 and 5-7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over US Patent No. 3,639,301 (Youker). Applicants respectfully traverse this ground of rejection and incorporate herein their previously filed remarks.

Applicants submit to anticipate a claim the cited art must teach each and every element of the claimed invention, either explicitly or inherently. And similarly, to render a claim obvious the cited reference must provide a clear teaching, suggestion or motivation to one skilled in the art at the time just before the invention was made to modify the cited art to arrive at the claimed invention. Applicants submit that Youker neither teaches each and every element of the claimed invention, either explicitly or inherently, nor does it render the present invention obvious.

According to the Office Action, Youker at column 2, lines 20-28 discusses heat aging and the solids content (gel). Namely, according to the Office Action, Youker teaches a solid content of 60%. Therefore, according to the Office Action, it is reasonable to presume that the initial solids content is lower and less than 30% given the desirability to heat age and raise the solids content. Applicants disagree with the interpretation of Youker.

First, Applicants submit solids content is not a synonym for gel content. As noted in Table 1 of the present application, both the solids content and the gel content are disclosed. Applicants submit one skilled in the art cannot assume the gel content of Youker based on the solids content disclosed therein. Accordingly, Applicants have performed the following experiment and synthesized a chloroprene latex according to the process disclosed in Youker et al. The results appear in the following Tables and attached Declaration (presented in accordance with the Tables in the present invention).

According to US 3,639,301 (Youker) a chloroprene latex was synthesized as Example G below. As illustrated in Table 1 below, a dispersion according to Youker has a gel content of 60 % and a solids content of 45%. And after storage the dispersion at 7 days/60°C the pH changes from 12.7 to 9.6., see Table 2a below. Applicants submit these results correlate with the disclosure of Youker at Column 1, lines 67-68). See also the attached Declaration. However, dispersion according to the present invention does not have a significant drop in pH after storage. See Table 2a, page 16, of the present invention, wherein the dispersion according to the present invention has a pH of 12.4 to 12.6. Further, Table 2c illustrates that the dispersion according to Youker is completely different from the present invention regarding to the initial strength and soft point.

Table 1a.

Disp. from ex.	Regulator (%)	Poly temp. (°C)	Conversion (%)	Gel Content (%)	Gel content in % after conditioning		
					1d	2d	3d
G	0	40	94	60	-	-	-

Table 1b. Increase in the solids content of the dispersions by creaming.

Example	11
Dispersion	G
Days cond. at 80°C	0
Gel content %	60
Solids in %	45
pH	12.7

Table 2a. Influence of the storage temperature on the pH of the dispersions.

Example	11
Dispersion	G
Days cond. at 80°C	0
Gel content %	90
pH before storage	12.7
pH after storage	9.6

Table 2c.

Example	11
Gel content	60
Initial strength (N/mm)	0.6
Soft point °C	143

Third, Applicants submit Example B in the present application at page 11 is similar to Example 1 in Youker. As illustrated in Table 1 of the present invention, similar polymerization conditions were employed, such as temperature, and the polymers obtained have a gel content of 60 % by weight. The product of Example B is not suitable for the preparation of adhesive formulations according to the present invention due to high gel content. Given such similarities between the comparison Example B of the present invention and Example 1 of Youker, one would not be motivated to modify the teachings of Youker in order to achieve the presently claimed invention. There is no mention of the gel content prior to creaming in Youker, and certainly no suggestion that starting with a lower gel content could lead to a preparation suitable for adhesive formulations.

According to Youker, an improved polychloroprene latex is useful for making polyisocyanide-modified foams is disclosed. There is no indication in Youker concerning the use of specific aqueous polychloroprene dispersion formulations having a specific gel content which are obtainable by a specific process comprising step a) and b) according to Claim 1 of the present invention.

Accordingly, Applicants submit Youker fails to render the present invention obvious to one skilled in the art at the time the invention was made. Therefore, Applicants request withdrawal of this ground of rejection and Applicants submit the present invention is in condition for allowance.

Claim Rejection under 35 U.S. C. § 103(a)

Claims 1-3 and 5-7 also stand rejected as obvious in view of EP 451 998 ("DuPont Reference"). Applicants submit the DuPont reference fails to render the present invention obvious.

The DuPont reference is directed to a process for stabilizing chloroprene copolymer latex, wherein the pH of the latex is maintained in the range of the highly acidic pH occurring at polymerization and up to a pH of 6.5. In the alternative, the aqueous polymer dispersion of the present invention is prepared at a pH of 10-14 and as claimed, the aqueous polymer dispersion of the present invention does not have a significant drop in pH after storage. Accordingly, the dispersions clearly have different pH values. Accordingly, Applicants request withdrawal of this ground of rejection.

Claim Rejection Under 35 U.S.C. § 103(a)

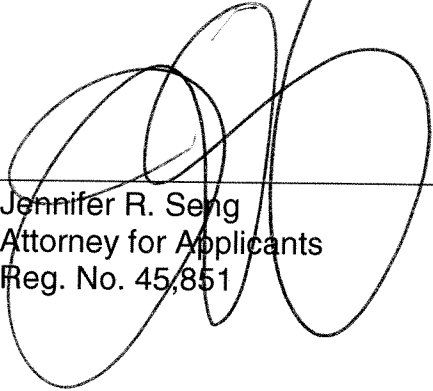
Claims 1-3 and 5-7 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of JP 200 04 9043 ("JP reference"). Applicants respectfully traverse this ground of rejection. The JP reference teaches a dispersion which is produced with the use of a non-ionic surfactant (See paragraph 007).

In the alternative, the present invention discloses the use of an anionic surfactant. Applicants submit one skilled in the art knows that using different emulsifying systems will result in different products. Accordingly, Applicants submit the Office Actions assumption that the dispersions of the reference would have the claimed properties is not supported by the general knowledge of one skilled in the art or the cited reference. Accordingly, Applicants request withdrawal of this ground of rejection.

The USPTO is hereby authorized to charge any fees, including any fees for an extension of time or those under 37 CFR 1.16 or 1.17, which may be required by this paper, and/or to credit any overpayments to Deposit Account No. 50-2527.

Respectfully submitted,

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APPENDIX